

REMARKS

The Final Rejection indicates that the "high electron conductive material" is a relative term, and that the claims do not include the feature that electrons move to the current collector even when the electrons discharged within the active material particles are distant from the current collector. All independent claims 1, 12 and 13 have been amended to include this feature. As previously argued, since the active material particles set forth in the claims at issue include a high electron-conductive material and/or have a coating of a high electron-conductive material on the surface, even the electrons discharged within the active material particles which are distant from the current collector can move to the current collector. The foils of the Dansui '805 patent do not have such a capability. Accordingly, although the active material particles filled in the vessels are not circulated, a three-dimensional battery can be formed. As a result, the claimed invention has the following advantages: (1) an active material particle circulating device is not necessary for the claimed invention; (2) the recovery and replacement of the degraded active material particles is possible for the claimed invention; (3) enlargement of scale is possible for the claimed invention; and (4) the energy density is larger for the claimed invention than for the use of the prior art foils.

Although the Examiner asserts that "Tsutsumi discloses active material which include a high electron-conductive material and/or have a coating of a high electron-conductive material on the surface" in page 4 of the Office Action, this assertion is erroneous. The Tsutsumi '507 particles are suspended in the liquid (electrolytic solution) in each vessel (see col. 6, lines 1-10) and are maintained dispersed with a fluidizing fluid (col. 6, line 9-14) these particles clearly cannot form a fixed layer as required in applicants' invention.

Further, the Examiner's understanding on Dansui is erroneous. Although Dansui discloses a nickel-hydrogen battery with an added thin film of nickel foil, there is a definite difference between the battery of Dansui and the claimed invention. Dansui discloses a nickel-hydrogen battery comprising a **positive electrode comprising a first nickel foil and a negative electrode comprising a second nickel foil**, but Dansui fails to disclose or suggest designing a battery by forming active material particles. The

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conventional battery of Dansui has drawbacks, as described at page 2, line 16 through page 4, line 16 of Applicants' specification.

Accordingly, it is clear that "the inventive concept of designing a battery by forming an active material particle with high electron-conductive material or coating it with high electron-conductive material on the surface is **not obvious in view of Dansui.**"

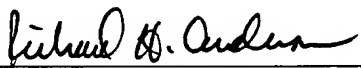
Therefore, it would not have been obvious to a person of ordinary skill in the art at the time of the invention to combine Tsutsumi with Dansui for the benefit of designing active material particles with high electron-conductive material for enhanced capacity density.

It is submitted that all claims are now of proper form and scope for allowance. Early and favorable consideration is respectfully requested.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 13-2855, under Order No. 19036/40136 from which the undersigned is authorized to draw.

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Respectfully submitted,

By 

Richard H. Anderson

Registration No.: 26,526
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive, Suite 6300
Sears Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant